

Amended claims

1. A method of increasing the cutting hardness of a shaped body comprising a crystalline aluminosilicate, wherein the shaped body comprises a binder selected from among oxides of silicon and/or zirconium and is treated with a gas consisting of water vapor at from 100 to 600°C and an absolute pressure of from 0.1 to 10 bar for a period of at least 20 hours and the shaped body has been calcined at from 100 to 600°C before the treatment with water vapor.
2. The method according to claim 1, wherein the shaped body is treated for a period of at least 50 hours.
3. The method according to either of the preceding claims, wherein the shaped body is treated continuously at a WHSV (weight hourly space velocity) of from 0.05 to 5 g of water vapor per gram of shaped body and per hour ($g_{\text{water vapor}}/(g_{\text{shaped body}} \cdot h)$).
4. The method according to claim 1 or 2, wherein the shaped body is treated continuously at a WHSV (weight hourly space velocity) of from 0.1 to 1 g of water vapor per gram of shaped body and per hour ($g_{\text{water vapor}}/(g_{\text{shaped body}} \cdot h)$).
5. The method according to any of the preceding claims, wherein the shaped body is treated at from 200 to 450°C and an absolute pressure of from 0.1 to 2 bar.
6. The method according to any of the preceding claims, wherein the shaped body is fixed in position (fixed bed) during the treatment with water vapor.
7. The method according to any of claims 1 to 6, wherein the crystalline aluminosilicate in the shaped body has an $\text{SiO}_2/\text{Al}_2\text{O}_3$ molar ratio of greater than 10:1.
8. The method according to any of claims 1 to 6, wherein the crystalline aluminosilicate in the shaped body has an $\text{SiO}_2/\text{Al}_2\text{O}_3$ molar ratio of greater than 50:1.
9. The method according to any of the preceding claims, wherein the crystalline aluminosilicate in the shaped body is at least partly in the H^+ and/or NH_4^+ form.
10. The method according to any of the preceding claims, wherein the crystalline aluminosilicate in the shaped body is of the pentasil type.

- 5 11. A process for preparing triethylenediamine (TEDA) by reaction of ethylenediamine (EDA) and/or piperazine (PIP) in the presence of a crystalline aluminosilicate catalyst, wherein a shaped body whose cutting hardness has been increased beforehand using a method according to any of claims 1 to 10 is used as catalyst.
- 10 12. The process according to claim 11, wherein the reaction is carried out continuously and in the gas phase.
- 15 13. The process according to either of the two preceding claims, wherein EDA and one or more amine compounds selected from the group consisting of monoethanolamine, diethanolamine, triethanolamine, PIP, diethylenetriamine, triethylenetetramine, tri(2-aminoethyl)amine, morpholine, N-(2-aminoethyl)-ethanolamine, N-(2-hydroxyethyl)piperazine, N-(2-aminoethyl)piperazine, N,N'-bis(2-aminoethyl)piperazine, N,N'-bis(2-hydroxyethyl)piperazine and N-(2-aminoethyl)-N'-(2-hydroxyethyl)piperazine are reacted.
- 20 14. The process according to any of the three preceding claims, wherein EDA and from 7 to 250% by weight of piperazine (PIP), based on EDA, are reacted.
- 25 15. The process according to any of the four preceding claims, wherein EDA, from 8 to 250% by weight of PIP and from 23 to 300% by weight of water, in each case based on EDA, are reacted.
- 30 16. The process according to any of the five preceding claims, wherein the reaction temperature for the reaction to form TEDA is from 310 to 390°C.
- 35 17. The process according to any of the six preceding claims, wherein the absolute pressure in the reaction to form TEDA is from 0.1 to 10 bar.
18. The use of a shaped body which comprises a crystalline aluminosilicate and whose cutting hardness has been increased beforehand using a method according to any of claims 1 to 10 as catalyst in a process for preparing triethylenediamine (TEDA) by reaction of ethylenediamine (EDA) and/or piperazine (PIP).
19. A process for chemical synthesis carried out in the presence of a crystalline aluminosilicate catalyst, wherein a shaped body whose cutting hardness has

been increased beforehand using a method according to any of claims 1 to 10 is used as catalyst.

- 5 20. The process according to claim 19, wherein the synthesis is an alkylation, disproportionation, acylation, isomerization, oligomerization, amination, alkoxylation, epoxidation, cyclization, hydroxylation, condensation, hydration or dehydration.
- 10 21. The use of a shaped body which comprises a crystalline aluminosilicate and whose cutting hardness has been increased beforehand using a method according to any of claims 1 to 10 as catalyst in a process for chemical synthesis which is catalyzed by crystalline aluminosilicates.